Docket 90048DAN
Customer No. 01333

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of	Group Art Unit: 2176
	Confirmation No.: 9982
Christopher J. Edge, et al	
	Examiner: Peter J. Smith
MODIFICATION OF COLOR VALUES IN PAGE DESCRIPTION FILES	

I hereby certify that this correspondence is being deposited today with the United States Postal Service as first class mail in an envelope addressed to Commissioner for Patents, Alexandria, VA 22313-1450.

Serial No. 09/534,824

~~Lisa DeMunck~~
Lisa DeMunck

~~August 1, 2007~~
Date

Filed March 23, 2000

Mail Stop APPEAL BRIEF-PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA. 22313-1450

Sir:

APPEAL BRIEF TRANSMITTAL

Enclosed herewith is Appellants' Appeal Brief for the above-identified application in response to the Notification of Non-Compliant Appeal Brief dated July 13, 2007.

The Commissioner is hereby authorized to charge the Appeal Brief filing fee to Eastman Kodak Company Deposit Account 05-0225. A duplicate copy of this letter is enclosed.

Respectfully submitted,

~~David A. Novais~~

David A. Novais/ld
Telephone: 585-722-9349
Facsimile: 585-477-1148
Enclosures

Attorney for Appellants
Registration No. 33,324

If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.

Docket 90048DAN
Customer No. 01333

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of	Group Art Unit: 2176
Christopher J. Edge, et al	Examiner: Peter J. Smith
MODIFICATION OF COLOR VALUES IN PAGE DESCRIPTION FILES	I hereby certify that this correspondence is being deposited today with the United States Postal Service as first class mail in an envelope addressed to Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450.
Serial No. 09/534,824	Lisa DeMunck
Filed 23 March 2000	August 1, 2007 Date

Mail Stop APPEAL BRIEF-PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA. 22313-1450

Sir:

APPEAL BRIEF PURSUANT TO 37 C.F.R. 41.37 and 35 U.S.C. 134

Appellants hereby appeal to the Board of Patent Appeals and Interferences from the Examiner's Final Rejection of claims 1-27, 29-33, 35-39 and 41-50 which was contained in the Office Action mailed .

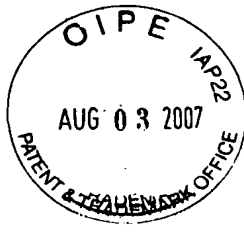A timely Notice of Appeal was filed January 18, 2007.

Table Of Contents

APPELLANT'S BRIEF ON APPEAL

Real Party In Interest

The entire interest in this application has been assigned by the inventor(s) to Eastman Kodak Company, Rochester, New York, the assignee and real party in interest in this application

Related Appeals And Interferences

No appeals or interferences are known which will directly affect or be directly affected by or have bearing on the Board's decision in the pending appeal.

Status Of The Claims

Appendix I provides a clean, double-spaced copy of the claims on appeal.
1. Claims 1-27, 29-33, 35-39 and 41-50 are pending in the application.
2. Claims 28, 34 and 40 have been cancelled.
3. Claims 1-27, 29-33, 35-39 and 41-50 stand finally rejected and are the subject of this appeal

Status Of Amendments

No amendments were made to the claims subsequent to the final rejection of October 18, 2006.

Summary of Claimed Subject Matter

A. Independent claim 1 reads as follows:

1. A method for modification of color values in a page description file (see page 1, lines17-23), the method comprising:

identifying at least some implicit color commands within the page description file (see page 8, lines 20-23 and Fig. 2, step 24);

converting the identified implicit color commands within the page description file to explicit color commands such that the explicit color commands replace the implicit color commands within the page description file (see page 8, line 23 to page 9, line 3 and Fig. 2, steps 26, 28, 30 and 32); and

modifying color values specified by the explicit color commands (see page 9, lines 3-11 and Fig. 2, step 34).

B. Independent claim 10 reads as follows:

10. A computer-implemented system for modification of color values in a page description file, the system comprising a processor that is programmed to:

identify implicit color commands within the page description file (see page 8, lines 20-23 and Fig. 2, step 24);

convert the identified implicit color commands within the page description file to explicit color commands such that the explicit color commands replace the implicit color commands within the page description file (see page 8, line 23 to page 9, line 3 and Fig. 2, steps 26, 28, 30 and 32); and

modify color values specified by the explicit color commands (see page 9, lines 3-11 and Fig. 2, step 34).

C. Independent claim 18 reads as follows:

18. A computer-readable medium storing program code that upon execution by a processor:

identifies at least some implicit color commands within the page description file (see page 8, lines 20-23 and Fig. 2, step 24);

converts the identified implicit color commands within the page description file to explicit color commands such that the explicit color commands replace the implicit color commands within the page description file (see page 8, line 23 to page 9, line 3 and Fig. 2, steps 26, 28, 30 and 32); and

modifies color values specified by the explicit color commands (see page 9, lines 3-11 and Fig. 2, step 34).

D. Independent claim 26 reads as follows:

26. A method for modification of color values in a page description file, the method comprising:

identifying implicit color commands within the page description file (see page 8, lines 20-23 and Fig. 2, step 24);

converting each of the implicit color commands within the page description file to a plurality of implicit color sub-commands such that the implicit color sub-commands replace the implicit color commands within the page description file (see page 8, line 23 to page 9, line 3 and Fig. 2, steps 26, 28, 30 and 32); and

modifying color values specified by the implicit color sub-commands (see page 9, lines 3-11 and Fig. 2, step 34),

wherein each of the implicit color commands pertains to a spatial area, and each of the implicit color sub-commands pertains to a sub-section within the spatial area (see page 3, lines 17-23 and page 10, line 26 through page 16, line7).

E. Independent claim 32 reads as follows:

32. A computer-implemented system for modification of color values in a page description file, the system comprising a processor that is programmed to:

identify implicit color commands within the page description file (see page 8, lines 20-23 and Fig. 2, step 24);

convert each of the implicit color commands within the page description file to a plurality of implicit color sub-commands such that the implicit color sub-commands replace the implicit color commands within the page description file (see page 8, line 23 to page 9, line 3 and Fig. 2, steps 26, 28, 30 and 32); and

modify color values specified by the implicit color sub-commands (see page 9, lines 3-11 and Fig. 2, step 34),

wherein each of the implicit color commands pertains to a spatial area, and each of the implicit color sub-commands pertains to a sub-section within the spatial area (see page 3, lines 17-23 and page 10, line 26 through page 16, line7).

F. Independent claim 38 reads as follows:

38. A computer-readable medium storing program code that upon execution by a processor:

identifies implicit color commands within the page description file (see page 8, lines 20-23 and Fig. 2, step 24);

converts each of the implicit color commands within the page description file to a plurality of implicit color sub-commands such that the implicit color sub-commands replace the implicit color commands within the page description file (see page 8, line 23 to page 9, line 3 and Fig. 2, steps 26, 28, 30 and 32); and

modifies color values specified by the implicit color sub-commands (see page 9, lines 3-11 and Fig. 2, step 34),

wherein each of the implicit color commands pertains to a spatial area, and each of the implicit color sub-commands pertains to a sub-section within the spatial area (see page 3, lines 17-23 and page 10, line 26 through page 16, line7).

G. Independent claim 44 reads as follows:

44. A method of modification of color values in a page description file, the method comprising:

accessing implicit color commands within the page description file (see page 8, lines 20-23 and Fig. 2, step 24);

converting the implicit color commands to explicit color commands (see page 8, line 23 to page 9, line 3 and Fig. 2, steps 26, 28, 30 and 32) by applying a conversion table to the implicit color commands, wherein the conversion table includes a library of explicit color commands for known implicit color commands (see page 9, lines 15-17 and Fig. 1, element 14);

modifying the explicit color values (see page 9, lines 3-11 and Fig. 2, step 34) without raster image processor-converting (RIP-converting) the page description file based on a profile that characterizes color output by a device to generate a revised page description file (see page 13, lines 4 through page 14, line 9).

H. Independent claim 45 reads as follows:

45. A computer-implemented system for modification of color values in a page description file, the system comprising a processor that is programmed to:

access implicit color commands within the page description file (see page 8, lines 20-23 and Fig. 2, step 24);

convert the implicit color commands to explicit color commands (see page 8, line 23 to page 9, line 3 and Fig. 2, steps 26, 28, 30 and 32) by applying a conversion table to the implicit color commands, wherein the conversion table includes a library of explicit color commands for known implicit color commands (see page 9, lines 15-17 and Fig. 1, element 14); and

modify the explicit color values (see page 9, lines 3-11 and Fig. 2, step 34) without raster image processor-converting (RIP-converting) the page description file based on a profile that characterizes color output by a device to generate a revised page description file (see page 13, lines 4 through page 14, line 9)..

I. Independent claim 46 reads as follows:

46. A computer-readable medium storing program code that upon execution by a processor:

accesses implicit color commands within the page description file (see page 8, lines 20-23 and Fig. 2, step 24);

converts the implicit color commands to explicit color commands (see page 8, line 23 to page 9, line 3 and Fig. 2, steps 26, 28, 30 and 32) by applying a conversion table to the implicit color commands, wherein the conversion table includes a library of explicit color commands for known implicit color commands (see page 9, lines 15-17 and Fig. 1, element 14); and

modifies the explicit color values (see page 9, lines 3-11 and Fig. 2, step 34) without raster image processor-converting (RIP-converting) the page description file based on a profile that characterizes color output by a device to generate a revised page description file(see page 13, lines 4 through page 14, line 9).

J. Independent claim 47 reads as follows:

47. A method for modification of color values in a page description file having implicit color commands that specify color values as a function of graphic information and color reference values, the method comprising:

identifying the implicit color commands within the page description file (see page 8, lines 20-23 and Fig. 2, step 24);

converting the implicit color commands within the page description file to explicit color commands within the page description file (see page 8, line 23 to page 9, line 3 and Fig. 2, steps 26, 28, 30 and 32) that specify explicit color values without raster image processing the page description file (see page 13, lines 4 through page 14, line 9) such that the explicit color commands replace the implicit color commands within the page description file, wherein converting the implicit color commands includes applying a conversion table to the implicit color commands, and wherein the conversion table includes a library of explicit color commands for known implicit color commands (see page 9, lines 15-17 and Fig. 1, element 14); and

modifying color values specified by the explicit color commands based on a profile that characterizes color output by a device to generate a revised page description file (see page 9, lines 3-11 and Fig. 2, step 34).

K. Independent claim 48 reads as follows:

48. A method for modification of color values in a page description file, the method comprising:

parsing the page description file to identify implicit color commands that provide implicit definitions of color values (see page 8, lines 20-23 and Fig. 2, step 24);

for each of the identified implicit color commands, generating an explicit color command that approximates the function and content defined (see page 8, line 23 to page 9, line 3 and Fig. 2, steps 26, 28, 30 and 32) by the identified implicit color command by applying a conversion table to the implicit color commands, wherein the conversion table includes a library of explicit color commands for known implicit color commands; and

replacing each of the identified implicit color commands within the page description file with the corresponding explicit command within the page description file (see page 9, lines 3-11 and Fig. 2, step 34).

L. Independent claim 50 reads as follows:

50. A method for modification of color values in a page description file, the method comprising:

identifying an implicit shading command within the page description file (see page 8, lines 20-23 and Fig. 2, step 24) that defines a graphic image object characterized by a starting color value, an ending color value, and a shading function over a range of color values between the starting color value and the ending color value;

converting the identified implicit shading command within the page description file to explicit color commands within the page description file without raster image processing the page description file (see page 8, line 23 to page 9, line 3 and Fig. 2, steps 26, 28, 30 and 32), wherein the explicit color commands for the implicit shading command defines the graphic image object as a plurality of sub-objects, each of the sub-objects being assigned a color value corresponding to a color value produced by the shading function in an area of the graphic image object corresponding to the respective sub-object (see page 10, line 25 through page 13, line 3 and Fig. 5); and

modifying color values specified by the explicit color commands based on a profile that characterizes color output by a device to generate a revised page description file (see page 9, lines 3-11 and Fig. 2, step 34).

Grounds of Rejection to be Reviewed on Appeal

The following issues are presented for review by the Board of Patent Appeals and Interferences:

A. Are Claims 1, 2, 4-11, 13-19, 21-27, 29-33, 35-39 and 41-43
   unpatentable under 35 U.S.C. 103 over the combination of Vyncke et
   al. (US Patent No. 5,926,185) in view of Adobe Illustrator 8.0?

B. Are claims 3, 12, 20 and 44-50 unpatentable under 35 U.S.C. 103 over the combination of Vyncke et al. and Ilustrator in view of IBM Technical Disclosure Bulletin (IBM)?

Arguments

A. The rejection of claims 1, 2, 4-11, 13-19, 21-27, 29-33, 35-39 and 41-43 under 35 U.S.C. 103 as being unpatentable over Vyncke et al. in view of Illustrator:

  i. Argument for independent claims 1, 10 and 18:

The Vyncke et al. patent relates to processing PDL commands to overcome problems related to printing process imposed constraints such as the inability to render lines of a thickness below a minimum threshold, to reduce registration errors inherent in the printing process, and to accommodate a limited number of inks available in a printer. Vyncke et al. also suggest processing the PDL commands to eliminate irrelevant and unnecessary commands in the PDL file.

To accomplish these goals, Vyncke et al. interpret a PDL file to generate a list of graphical objects such as vectors, splines, text, and continuous tones. The position, color, size, and grouping of the objects are also identified and listed. The list is optimized by eliminating irrelevant and unnecessary commands and by modifying the PDL commands accordingly.

The final rejection referred specifically to the Color Mapping section of the Vyncke et al. patent, starting at line 45 of column 5. In that section, Vyncke et al. suggest producing a color database of all colors used in the PDL file, analyzing the complete color database, and eliminating redundancies, such as a color that is a tint of another color. Accordingly, Vyncke et al. propose replacing an explicit color value that identifies a tint of a base color with an implicit color command that defines the tint as a percentage amount of the base color.

Vyncke et al. further suggest analyzing the complete color database for colors that are blends of two other colors and eliminating them from the color

database by replacing their explicit color values with an implicit color command that defines the percentage of each of the blended colors.

Vyncke et al. Teach Away From the Present Invention:

Independent Claim 1 relates to a method for modification of color values in a PDL file by identifying implicit color commands within the PDL file, converting these identified implicit color commands to explicit color commands, and modifying color values specified by the explicit color commands.

In contrast, the section of Vyncke et al. referred to in the final rejection discloses replacing an explicit color value that identifies a tint of a base color or a blend of two colors with an implicit color command that defines the tint or blend as a percentage amount of the base color(s). While this serves Vyncke et al's goal of eliminating irrelevant and unnecessary commands in the PDL file, it is the opposite of converting implicit color commands to explicit color commands so that the explicit color values may be accurately modified to provide enhanced color fidelity

Vyncke et al. rely on replacing an explicit color value with an implicit color command. To modify Vyncke et al. so that implicit color commands are replaced by a set of explicit color commands, as suggested in the final rejection, would render Vyncke et al's goal of eliminating irrelevant and unnecessary commands in the PDL file unattainable; and the function of Vyncke et al. would be destroyed with the combination.

"[A] reference must have been considered in its entirety, for disclosures which taught away from the invention as well as disclosures which directed one skilled in the art towards the claimed subject matter." *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.* 227 USPQ 657,666 (Fed. Cir., 1985).

There Is No Disclosure In The References To Support Their Combination:

If a combination of references is cited in support of a rejection on the basis of obviousness under 35 U.S.C. 103, there must be some affirmative teaching in the prior art that suggests the proposed combination.

Illustrator suggests manually changing the commands of a PDL file to overcome printing difficulties. According to the final rejection, Illustrator

teaches converting an implicit color command into a set of explicit color commands.

Assuming arguendo that all features of Claims 1, 10 and 18 are taught by a combination of Vyncke et al. and Illustrator, there is no teaching or suggestion that provides motivation for a person skilled in the art to combine the references. "The question of obviousness under 35 U.S. C. 103 is not what a routineer could have done but what it would have 'been obvious' for such a person to do." *Ex parte Marinaccio*, 10 USPQ 2d 1716 (PTO Bd App & Inter, 1989) citing *Ortho Kinetics Inc. v. Safety Travel Chairs*, 1 USPQ 2d 1081 (Fed. Cir. 1986)

The final rejection proposes that the motivation for combining Vyncke et al. and Illustrator hinges on Illustrator's suggestion to convert implicit color commands into explicit color commands if there is difficulty printing files of implicit commands. The final rejection cites the following passage in the Vyncke et al. patent to show that Vyncke et al. are interested in overcoming difficulty in printing files, and would look to Illustrator for a way to overcome such difficulty: "it is desirable to edit page description color commands to improve printing quality" (last 2 lines on page 3 of the final rejection).

However, the problem of improving printing quality addressed by Vyncke et al. would not be overcome by converting implicit color commands into explicit color commands. Vyncke et al. note that some commercial printers have constraints imposed by the printing process itself. These constraints include the inability to render very thin lines, to reduce registration errors inherent in the printing process, to accommodate a limited number of inks available in a printer, and to eliminate irrelevant and unnecessary complexity in the original PostScript file. None of the constraints enumerated by Vyncke et al. would benefit from a conversion of implicit color commands into explicit color commands as taught by Illustrator. In fact, Vyncke et al. overcomes their printing quality problem by replacing an explicit color value with an implicit color command. Since Vyncke et al. is already dealing with PDL files of explicit color values there would be no reason to turn to Illustrator's teaching of converting implicit color commands into explicit color commands.

The final rejection points out that *"the instant claims merely require changing from implicit to explicit, and does [sic.] not limit the scope from comprising any previous conditions or post conditions (i.e. previous reversals, etc.)"*; see the third paragraph of the Examiner's Response to Arguments on page 15 of the final rejection. The Examiner's observations are, of course, true. Still, the question of obviousness under 35 U.S.C. 103 is not what could have been done within the scope of the claims, but what would have been obvious for a routineer to have done. The Examiner is still required to show a teaching or suggestion that provides motivation for a person skilled in the art to combine the references.

Insofar as Vyncke et al. teach the conversion of explicit objects to implicit objects, the Examiner's proposed combination of Vyncke et al. and Illustrator would appear to be inapposite. On one hand, the process of Vyncke et al. converts explicit objects to implicit objects, and on the other hand, the Examiner is arguing that a skilled person would have been motivated to essentially undo this process of Vyncke et al. via the teaching of Illustrator. There appears to be no reason, whatsoever, for a person of ordinary skill in the art to perform the contradictory processes of Vyncke et al. and Illustrator in any combination.

The references in combination do not disclose the claimed invention.

Assuming arguendo that the references might be capable of combination, there is at least one limitation in the claimed invention that is not disclosed by the references individually or in combination. To establish *prima facie* obviousness, all the claim limitations must be taught or suggested by the prior art. *See* MPEP 2143.03. "Each element of a claim is material." *Ashland Oil*, Inc. v. *Delta Resins & Refractories, Inc.*, 227 USPQ 657,666 (Fed. Cir., 1985).

Claims 1, 10 and 18 include the limitation of modifying color values that are specified by the explicit color commands. That is, according to the claimed invention, implicit color commands are converted to explicit color commands and then modified. This process improves color fidelity of an output device relative to conventional color value modifications that would otherwise

-11-

occur with respect to the implicit commands.

Vyncke et al. do not disclose modification of explicit commands of color values. To the extent that Illustrator may disclose the conversion of implicit commands to explicit commands, the process of Illustrator is manually performed when a user is having difficulty with the printing. Nothing in Illustrator concerns the modification of color values.

ii. Argument for claims 2 and 4-9:

Claims 2 and 4-9 depend from Claim 1 and are patentable therewith for the reasons set forth above.

iii. Argument for claims 11 and 13-17:

Claims 11 and 13-17 depend from Claim 10 and are patentable therewith for the reasons set forth above.

iv. Argument for claims 19 and 21-25:

Claims 19 and 21-25 depend from Claim 18 and are patentable therewith for the reasons set forth above.

v. Argument for independent claims 26, 32 and 38:

Independent claims 26, 32 and 38 call for modification of color values in a PDL file. Implicit color commands are identified within the PDL file and replaced by implicit color sub-commands. Color values specified by the implicit color sub-commands are modified, wherein each of the implicit color commands pertains to a spatial area, and each of the implicit color sub-commands pertains to a sub-section within the spatial area.

Like Claims 1, 10 and 18, Claims 26, 32 and 38 require modification of color values. Unlike claims 1, 10 and 18, however, Claims 26, 32 and 38 require conversion of implicit color commands to implicit color sub-commands, rather than to explicit commands.

In rejecting Claims 26, 32 and 38, the Examiner argues that Illustrator teaches the conversion of implicit color commands to implicit color sub-commands. However, for the rejections of Claims 1, 10 and 18, the Examiner argued that Illustrator teaches the conversion of implicit color commands to

explicit color commands. Clearly, these arguments by the Examiner are mutually exclusive. In fact, the "expand" command discussed in Illustrator does not generate implicit sub-commands as required by Claims 26, 32 and 38. However, in the alternative, if the objects generated by Illustrator are construed by the Examiner as being implicit sub-commands, then they could not also be reasonably construed as explicit commands. The Examiner cannot attribute the same features of Illustrator to contradictory features of different claims. Either the rejections of claims 1, 10 and 18 or the rejections of claims 26, 32 and 38 must be overruled given this contradiction in the Examiner's rationale.

Applicants note, however, that given the further requirements of Claims 26, 32 and 38, this issue should be moot in the current application. For example, neither Vyncke et al. nor Illustrator discloses or suggests the modification of color values specified by the implicit color sub-commands as required by Claims 26, 32 and 38.

vi. Argument for claims 27 and 29-31:

Claims 27 and 29-31 depend from Claim 26 and are patentable therewith for the reasons set forth above.

vii. Argument for claims 33, and 35-37:

Claims 33 and 35-37 depend from Claim 32 and are patentable therewith for the reasons set forth above.

viii. Argument for claims 39 and 41-43:

Claims 39 and 41-43 depend from Claim 38 and are patentable therewith for the reasons set forth above.

B. The rejection of claims 3, 12, 20 and 44-50 as unpatentable under 35 U.S.C. 103 over the combination of Vyncke et al. and Ilustrator in view of IBM Technical Disclosure Bulletin (IBM):

i. Argument for claims 3, 12 and 20:

First, claims 3, 12 and 20 depend from claims 1, 10 and 18, respectively, and are patentable therewith for the reasons set forth above. Claims

3, 12 and 20 further require that converting the identified implicit color commands includes applying a conversion table to the implicit color commands, wherein the conversion table includes a library of explicit color commands for known implicit color commands.

The final rejection notes that IBM teaches color rendering dictionaries used with tables for color transformations. The Examiner suggests that it would have been obvious to use color rendering dictionaries with tables as disclosed by IBM to increase the speed of Vyncke et al.

Vyncke et al. proposes processing PDL commands to overcome problems related to constraints imposed by the printing process such as the inability to render lines of a thickness below a minimum threshold, to reduce registration errors inherent in the printing process, and to accommodate a limited number of inks available in a printer. Vyncke et al. also suggest processing the PDL commands to eliminate irrelevant and unnecessary commands in the PDL file. To accomplish these goals, Vyncke et al. interpret a PDL file to generate a list of graphical objects such as vectors, splines, text, and continuous tones. The position, color, size, and grouping of the objects are also identified and listed. The list is then optimized by eliminating irrelevant and unnecessary commands, and the PDL commands are modified accordingly.

The Examiner does not suggest how the use of color rendering dictionaries with tables as disclosed by IBM would increase the speed of the process described by Vyncke et al., nor how the task might be accomplished. After indicating a rejection under 35 USC 103, the Examiner must set forth (1) the difference or differences in the claim over the applied references, (2) the proposed modification of the applied references necessary to arrive at the claimed subject matter, and (3) an explanation why such proposed modification would be obvious (MPEP 706.02). In the rejection of Claims 3, 12 and 20, the Examiner has not set forth the proposed modification of Vyncke et al. in a way that would actually function to process PDL commands to overcome problems related to printing process imposed constraints such as the inability to render lines of a thickness below a minimum threshold, to reduce registration errors inherent in the printing process, to accommodate a limited number of inks available in a printer, or to

eliminate irrelevant and unnecessary commands in the PDL file.

i. Argument for claims 44-50:

Claims 44-50 should be allowed for at least the reasons advanced above with respect to independent claims 1, 10 and 18. Although the claims are not identical, the arguments advanced above with respect to 1, 10 and 18 also apply to the various features recited in independent Claims 44-50.

Claims 44-46 set forth that modification of the explicit color values is accomplished without raster image processor converting the PDL file. The Examiner's reliance on IBM is flawed because IBM is specifically concerned with rasterization of the PS file.

Claim 50 recites a method for modification of color values in a PDL file by modifying the color values specified by the explicit color commands, which were converted from the implicit shading command. Claim 50 requires that such modification of the color values specified by the explicit color commands is based on a profile of an output device, and that such modification results in the generation of a revised PDL file. Nothing in Vyncke et al., Illustrator or IBM suggests such features.

Accordingly, the claims define a method and system that are not taught or rendered obvious by the references of record based on a proper application of 35 U.S.C. 102 or 103; the Appellants faced and solved unique problems that were not faced or even mentioned in any of the references of record; and the rejections of the claims are based on improper reading of the disclosure of the references.

Conclusion

For the above reasons, Appellants respectfully request that the Board of Patent Appeals and Interferences reverse the rejection by the Examiner and mandate the allowance of the pending claims .

Respectfully submitted,

David A. Novais/ld
Telephone: 585-722-9349
Facsimile: 585-477-1148
Enclosures

Attorney for Appellants
Registration No. 33,324

If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.

Appendix I - Claims on Appeal

1.   A method for modification of color values in a page description file, the method comprising:

identifying at least some implicit color commands within the page description file;

converting the identified implicit color commands within the page description file to explicit color commands such that the explicit color commands replace the implicit color commands within the page description file; and

modifying color values specified by the explicit color commands.

2.   The method of claim 1, wherein converting the identified implicit color commands includes converting the implicit color commands without raster image processing the page description file.

3.   The method of claim 1, wherein converting the identified implicit color commands includes applying a conversion table to the implicit color commands, wherein the conversion table includes a library of explicit color commands for known implicit color commands.

4.   The method of claim 1, wherein one or more of the identified implicit color commands defines reproduction of a graphic image object over a color range, and the corresponding explicit color command defines reproduction of the image object by reproduction of individual color values within the color range.

5.   The method of claim 1, wherein the conversion includes converting substantially all of the implicit color commands within the page description file to explicit color commands.

6.   The method of claim 1, wherein one or more of the identified implicit color commands is a shading command that defines a graphic image object characterized by a starting color value, an ending color value, and a shading function over a range of color values between the starting color value and the ending color value.

7.   The method of claim 6, wherein the explicit color command for the shading command defines the graphic image object as a plurality of sub-objects, each of the sub-objects being assigned a color value corresponding to a color value produced by the shading function in an area of the graphic image object corresponding to the respective sub-object.

8.   The method of claim 1, wherein the color values include cyan, magenta, yellow, and black color values.

9.   The method of claim 1, wherein the explicit color commands, upon raster imaging processing by an output device, define visual output that is analogous to visual output defined by the corresponding implicit color commands.

10.   A computer-implemented system for modification of color values in a page description file, the system comprising a processor that is programmed to:

identify implicit color commands within the page description file;

convert the identified implicit color commands within the page description file to explicit color commands such that the explicit color commands replace the implicit color commands within the page description file; and

modify color values specified by the explicit color commands.

11.   The system of claim 10, wherein the processor is programmed to convert the identified implicit color commands without raster image processing the page description file.

12.   The system of claim 10, wherein the processor is programmed to convert the identified implicit color commands by applying a conversion table to the implicit color commands, wherein the conversion table includes a library of explicit color commands for known implicit color commands.

13.   The system of claim 10, wherein one or more of the identified implicit color commands defines reproduction of a graphic image object over a color range, and the corresponding explicit color command defines reproduction of the image object by reproduction of individual color values within the color range.

14.   The system of claim 10, wherein the processor converts substantially all implicit color commands within the page description file to explicit color commands.

15.   The system of claim 10, wherein one or more of the identified implicit color commands is shading command that defines a graphic image object characterized by a starting color value, an ending color value, and a shading function over a range of color values between the starting color value and the ending color value.

16.   The system of claim 15, wherein the explicit color command for the shading command defines the graphic image object as a plurality of sub-objects, each of the sub-objects being assigned a color value corresponding to a color value produced by a shading function in an area of the graphic image object corresponding to the respective sub-object.

17.   The system of claim 10, wherein the color values include cyan, magenta, yellow, and black color values.

18.   A computer-readable medium storing program code that upon execution by a processor:

identifies at least some implicit color commands within the page description file;

converts the identified implicit color commands within the page description file to explicit color commands such that the explicit color commands replace the implicit color commands within the page description file; and

modifies color values specified by the explicit color commands.

19.   The computer-readable medium of claim 18, wherein the program code is arranged to convert the identified implicit color commands without raster image processing the page description file.

20.   The computer-readable medium of claim 18, wherein the program code is arranged to convert the identified implicit color commands by applying a conversion table to the implicit color commands, wherein the conversion table includes a library of explicit color commands for known implicit color commands.

21.   The computer-readable medium of claim 18, wherein one or more of the identified implicit color commands defines reproduction of an image object over a color range, and the corresponding explicit color command defines reproduction of the image object by reproduction of individual color values within the color range.

22. The computer-readable medium of claim 18, wherein the program code is configured such that the processor converts substantially all implicit color commands within the page description file to explicit color commands.

23. The computer-readable medium of claim 18, wherein one or more of the identified implicit color commands is a shading command that defines a graphic image object characterized by a starting color value, and ending color value, and a shading function over a range of color values between the starting color value and the ending color value.

24. The computer-readable medium of claim 23, wherein the explicit color command for the shading command defines the graphic image object as a plurality of sub-objects, each of the sub-objects being assigned a color value corresponding to a color value produced by the shading function in an area of the image object corresponding to the respective sub-object.

25. The computer-readable medium of claim 18, wherein the color values include cyan, magenta, yellow, and black color values.

26. A method for modification of color values in a page description file, the method comprising:
    identifying implicit color commands within the page description file;
    converting each of the implicit color commands within the page description file to a plurality of implicit color sub-commands such that the implicit

color sub-commands replace the implicit color commands within the page description file; and

modifying color values specified by the implicit color sub-commands,

wherein each of the implicit color commands pertains to a spatial area, and each of the implicit color sub-commands pertains to a sub-section within the spatial area.

27.   The method of claim 26, wherein converting the implicit color commands includes converting the implicit color commands without raster image processing the page description file.

Claim 28 (Canceled).

29.   The method of claim 26, wherein the conversion includes converting substantially all of the implicit color commands within the page description file to implicit color sub-commands.

30.   The method of claim 26, wherein the conversion includes converting some of the implicit color commands within the page description file to implicit color sub-commands, and converting others of the implicit color commands to explicit color commands.

31.   The method of claim 26, wherein the color values include cyan, magenta, yellow and black color values.

32.   A computer-implemented system for modification of color values in a page description file, the system comprising a processor that is programmed to:

identify implicit color commands within the page description file;

convert each of the implicit color commands within the page description file to a plurality of implicit color sub-commands such that the implicit color sub-commands replace the implicit color commands within the page description file; and

modify color values specified by the implicit color sub-commands,

wherein each of the implicit color commands pertains to a spatial area, and each of the implicit color sub-commands pertains to a sub-section within the spatial area.

33.   The system of claim 32, wherein converting the implicit color commands includes converting the implicit color commands without raster image processing the page description file.

Claim 34 (Canceled).

35.   The system of claim 32, wherein the conversion includes converting substantially all of the implicit color commands within the page description file to implicit color sub-commands.

36. The system of claim32, wherein the conversion includes converting some of the implicit color commands within the page description file to implicit color sub-commands, and converting others of the implicit color commands to explicit color commands.

37. The system of claim 32, wherein the color values include cyan, magenta, yellow, and black color values.

38. A computer-readable medium storing program code that upon execution by a processor:

identifies implicit color commands within the page description file;

converts each of the implicit color commands within the page description file to a plurality of implicit color sub-commands such that the implicit color sub-commands replace the implicit color commands within the page description file; and

modifies color values specified by the implicit color sub-commands,

wherein each of the implicit color commands pertains to a spatial area, and each of the implicit color sub-commands pertains to a sub-section within the spatial area.

39. The computer-readable medium of claim 38, wherein the conversion of the implicit color commands includes converting the implicit color commands without raster image processing the page description file.

Claim 40 (Canceled).

41.   The computer-readable medium of claim 38, wherein the conversion includes converting substantially all of the implicit color commands within the page description file to implicit color sub-commands.

42   The computer-readable medium of claim 38, wherein the conversion includes converting some of the implicit color commands within the page description file to implicit color sub-commands, and converting others of the implicit color commands to explicit color commands.

43.   The computer-readable medium of claim 38, wherein the color values include cyan, magenta, yellow, and black color values.

44. A method of modification of color values in a page description file, the method comprising:

accessing implicit color commands within the page description file;

converting the implicit color commands to explicit color commands by applying a conversion table to the implicit color commands, wherein the conversion table includes a library of explicit color commands for known implicit color commands;

modifying the explicit color values without raster image processor-converting (RIP-converting) the page description file based on a profile that characterizes color output by a device to generate a revised page description file.

45. A computer-implemented system for modification of color values in a page description file, the system comprising a processor that is programmed to:

access implicit color commands within the page description file;

convert the implicit color commands to explicit color commands by applying a conversion table to the implicit color commands, wherein the conversion table includes a library of explicit color commands for known implicit color commands; and

modify the explicit color values without raster image processor-converting (RIP-converting) the page description file based on a profile that characterizes color output by a device to generate a revised page description file.

46. A computer-readable medium storing program code that upon execution by a processor:

accesses implicit color commands within the page description file;

converts the implicit color commands to explicit color commands by applying a conversion table to the implicit color commands, wherein the conversion table includes a library of explicit color commands for known implicit color commands; and

modifies the explicit color values without raster image processor-converting (RIP-converting) the page description file based on a profile that characterizes color output by a device to generate a revised page description file.

47.   A method for modification of color values in a page description file having implicit color commands that specify color values as a function of graphic information and color reference values, the method comprising:

identifying the implicit color commands within the page description file;

converting the implicit color commands within the page description file to explicit color commands within the page description file that specify explicit color values without raster image processing the page description file such that the explicit color commands replace the implicit color commands within the page description file, wherein converting the implicit color commands includes applying a conversion table to the implicit color commands, and wherein the conversion table includes a library of explicit color commands for known implicit color commands; and

modifying color values specified by the explicit color commands based on a profile that characterizes color output by a device to generate a revised page description file.

48.   A method for modification of color values in a page description file, the method comprising:

parsing the page description file to identify implicit color commands that provide implicit definitions of color values;

for each of the identified implicit color commands, generating an explicit color command that approximates the function and content defined by the identified implicit color command by applying a conversion table to the implicit color commands, wherein the conversion table includes a library of explicit color commands for known implicit color commands; and

replacing each of the identified implicit color commands within the page description file with the corresponding explicit command within the page description file.

49.   The method of claim 48, further comprising leaving intact implicit spatial commands within the page description file without converting the implicit spatial commands to explicit spatial commands.

50.   A method for modification of color values in a page description file, the method comprising:

identifying an implicit shading command within the page description file that defines a graphic image object characterized by a starting color value, an ending color value, and a shading function over a range of color values between the starting color value and the ending color value;

converting the identified implicit shading command within the page

description file to explicit color commands within the page description file

without raster image processing the page description file, wherein the explicit

color commands for the implicit shading command defines the graphic image

object as a plurality of sub-objects, each of the sub-objects being assigned a color

value corresponding to a color value produced by the shading function in an area

of the graphic image object corresponding to the respective sub-object; and

modifying color values specified by the explicit color commands based on

a profile that characterizes color output by a device to generate a revised page

description file.

Appendix II - Evidence

None

<u>Appendix III – Related Proceedings</u>

None